r M	Number: 09/965, 116A	Processing Date: 3-29-0 Edited by: M. SPENCER-
	Changed a file from non-ASCII to ASCII	Verified by:(STIC st
	Changed the margins in cases where the sequence text was "wrapped" down to the next line.	
	Edited a format error in the Current Application Data section, specifically:	
	Edited the Current Application Data section with the actual current number. The surpoer inquited by fine applicant was the prior application data; or other	
	Added the mandatory heading and subheadings for "Current Application Data".	
	Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.	
	Changed the spelling of a mandatory field (the headings or subheadings), specifically:	
	Corrected the SEQ ID NO when obviously incorrect. The sequence	numbers that were edited were:
	Inserted or corrected a nucleic number at the end of a nucleic line.	SEQ ID NO's edited:
	Corrected subheading placement. All responses must be on the san applicant placed a response below the subheading, this was moved to	ne line as each subheading. If the to its appropriate place.
	Inserted colons after headings/subheadings. Headings edited include	ded:
	Deleted extra, invalid, headings used by an applicant, specifically:	
•	Deleted: non-ASCII "garbage" at the beginning/end of files; page numbers throughout text; other invalid text, such as_	secretary initials/filename at end of file
	Inserted mandatory headings, specifically:	
	Corrected an obvious error in the response, specifically:	
	Edited identifiers where upper case is used but lower case is require	ed, or vice versa.
	Corrected an error in the Number of Sequences field, specifically:	
-	A "Hard Page Break" code was inserted by the applicant. All occurr	ences had to be deleted.
	Deleted ending stop codon in amino acid sequences and adjusted the	
	due to a Patentin bug). Sequences corrected:	-

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.



OIPE

RAW SEQUENCE LISTING DATE: 03/29/2002 PATENT APPLICATION: US/09/965,116A TIME: 10:09:34

Input Set : A:\pto_ms.txt

Output Set: N:\CRF3\03292002\1965116A.raw

3 <110> APPLICANT: Kandimalla, Ekambar R. Zhao, Qiuyan 5 Yu, Dong Agrawal, Sudhir 8 <120> TITLE OF INVENTION: Modulation of Immunostimulatory Activity of Immunostimulatory Modified oligodeoxynucleotide phosphorothicate Analogs by Positional Chemical Changes 12 <130> FILE REFERENCE: HYZ-479CP (47508.577) 14 <140> CURRENT APPLICATION NUMBER: US 09/965,116A C--> 15 <141> CURRENT FILING DATE: 2002-03-08 17 <150> PRIOR APPLICATION NUMBER: US 09/712,898 18 <151> PRIOR FILING DATE: 2000-11-15 20 <150> PRIOR APPLICATION NUMBER: US 60/235,452 21 <151> PRIOR FILING DATE: 2000-09-26 23 <150> PRIOR APPLICATION NUMBER: US 60/235,453 24 <151> PRIOR FILING DATE: 2000-09-26 26 <160> NUMBER OF SEQ ID NOS: 112 28 <170> SOFTWARE: FastSEQ for Windows Version 4.0 30 <210> SEQ ID NO: 1 31 <211> LENGTH: 18 32 <212> TYPE: DNA 33 <213> ORGANISM: Artificial Sequence 35 <220> FEATURE: 36 <223> OTHER INFORMATION: synthesis of CpG-PS-oligos containing cytosine analogs 38 <400> SEQUENCE: 1 39 ctatctgacg ttctctgt 18 41 <210> SEQ ID NO: 2 42 <211> LENGTH: 18 43 <212> TYPE: DNA 44 <213> ORGANISM: Artificial Sequence 46 <220> FEATURE: 47 <223> OTHER INFORMATION: synthesis of CpG-PS-oligos containing cytosine analogs W--> 49 <221> NAME/KEY: modified_base 50 <222> LOCATION: 9 51 <223> OTHER INFORMATION: c = 5-hydroxydeoxycytidine W--> 53 < 400 > 254 ctatctgacg ttctctgt 18 56 <210> SEQ ID NO: 3 57 <211> LENGTH: 18 58 <212> TYPE: DNA 59 <213> ORGANISM: Artificial Sequence 61 <220> FEATURE:

62 <223> OTHER INFORMATION: synthesis of CpG-PS-oligos containing cytosine analogs

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/965,116A

DATE: 03/29/2002
TIME: 10:09:34

Input Set : A:\pto_ms.txt

Output Set: N:\CRF3\03292002\1965116A.raw

W--> 64 <221> NAME/KEY: modified_base 65 <222> LOCATION: 10 66 <223> OTHER INFORMATION: c = 5-hydroxydeoxycytidine W--> 68 <400> 3 69 ctatctgacc ttctctgt 18 71 <210> SEQ ID NO: 4 72 <211> LENGTH: 18 73 <212> TYPE: DNA 74 <213> ORGANISM: Artificial Sequence 76 <220> FEATURE: 77 <223> OTHER INFORMATION: synthesis of CpG-PS-oligos containing cytosine analogs W--> 79 <221> NAME/KEY: modified base 80 <222> LOCATION: 9 81 <223> OTHER INFORMATION: c = N4-ethyldeoxycytidine W--> 83 <400> 4 84 ctatctgacg ttctctgt 18 86 <210> SEQ ID NO: 5 87 <211> LENGTH: 18 88 <212> TYPE: DNA 89 <213> ORGANISM: Artificial Sequence 91 <220> FEATURE: 92 <223> OTHER INFORMATION: synthesis of CpG-PS-oligos containing cytosine analogs W--> 94 <221> NAME/KEY: modified_base 95 <222> LOCATION: 10 96 <223> OTHER INFORMATION: c = N4-ethyldeoxycytidine W--> 98 <400> 5 99 ctatctgacc ttctctgt 18 101 <210> SEQ ID NO: 6 102 <211> LENGTH: 16 103 <212> TYPE: DNA 104 <213> ORGANISM: Artificial Sequence 106 <220> FEATURE: 107 <223> OTHER INFORMATION: synthesis of end-blocked CpG-PS modified oligodeoxynucleotide 108 phosphorothioate 110 <400> SEQUENCE: 6 111 aaggtcgagc gttctc 16 113 <210> SEQ ID NO: 7 114 <211> LENGTH: 18 115 <212> TYPE: DNA 116 <213> ORGANISM: Artificial Sequence W--> 117 <220> FEATURE: 118 <223> OTHER INFORMATION: synthesis of end-blocked CpG-PS modified oligodeoxynucleotide phosphorothioate 121 <400> SEQUENCE: 7 122 atggcgcacg ctgggaga 18 124 <210> SEQ ID NO: 8

125 <211> LENGTH: 18 126 <212> TYPE: DNA

127 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING

DATE: 03/29/2002 TIME: 10:09:34

18

18

18

18

PATENT APPLICATION: US/09/965,116A

Input Set : A:\pto_ms.txt

Output Set: N:\CRF3\03292002\I965116A.raw

- 129 <220> FEATURE:
- 130 <223> OTHER INFORMATION: oligodeoxynucleotide phosphorothioate
- 132 <400> SEQUENCE: 8
- 133 cctactagcg ttctcatc
- 135 <210> SEQ ID NO: 9
- 136 <211> LENGTH: 18
- 137 <212> TYPE: DNA
- 138 <213> ORGANISM: Artificial Sequence
- 140 <220> FEATURE:
- 141 <223> OTHER INFORMATION: oligodeoxynucleotide phosphorothioate
- W--> 143 <221> NAME/KEY: modified_base
 - 144 <222> LOCATION: 10
 - 145 <223> OTHER INFORMATION: g = 1', 2'-Dideoxyribose
- W--> 147 <400> 9
 - 148 cctactagcg ttctcatc
 - 150 <210> SEQ ID NO: 10
 - 151 <211> LENGTH: 18
 - 152 <212> TYPE: DNA
 - 153 <213> ORGANISM: Artificial Sequence
 - 155 <220> FEATURE:
 - 156 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
- W--> 158 <221> NAME/KEY: modified_base
 - 159 <222> LOCATION: 8
 - 160 <223> OTHER INFORMATION: g = 1', 2'-Dideoxyribose
- W--> 162 <400> 10
 - 163 cctactagcg ttctcatc
 - 165 <210> SEQ ID NO: 11
 - 166 <211> LENGTH: 18
 - 167 <212> TYPE: DNA
 - 168 <213> ORGANISM: Artificial Sequence
 - 170 <220> FEATURE:
 - 171 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
- W--> 173 <221> NAME/KEY: modified_base
 - 174 <222> LOCATION: 7
 - 175 <223> OTHER INFORMATION: a = 1',2'-Dideoxyribose
- W--> 177 <400> 11
 - 178 cctactagcg ttctcatc
 - 180 <210> SEQ ID NO: 12
 - 181 <211> LENGTH: 18
 - 182 <212> TYPE: DNA
 - 183 <213> ORGANISM: Artificial Sequence
 - 185 <220> FEATURE:
 - 186 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
- W--> 188 <221> NAME/KEY: modified_base
 - 189 <222> LOCATION: 6
 - 190 <223> OTHER INFORMATION: t = 1',2'-Dideoxyribose
- W--> 192 <400> 12
 - 193 cctactagcg ttctcatc
 - 195 <210> SEQ ID NO: 13

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/965,116A

DATE: 03/29/2002 TIME: 10:09:34

18

18

18

18

Input Set : A:\pto_ms.txt

Output Set: N:\CRF3\03292002\1965116A.raw

- 196 <211> LENGTH: 18
- 197 <212> TYPE: DNA
- 198 <213> ORGANISM: Artificial Sequence
- 200 <220> FEATURE:
- 201 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
- W--> 203 <221> NAME/KEY: modified_base
 - 204 <222> LOCATION: 5
 - 205 <223> OTHER INFORMATION: c = 1',2'-Dideoxyribose
- W--> 207 <400> 13
 - 208 cctactagcg ttctcatc
 - 210 <210> SEQ ID NO: 14
 - 211 <211> LENGTH: 18
 - 212 <212> TYPE: DNA
 - 213 <213> ORGANISM: Artificial Sequence
 - 215 <220> FEATURE:
 - 216 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
- W--> 218 <221> NAME/KEY: modified_base
 - 219 <222> LOCATION: 4
 - 220 <223> OTHER INFORMATION: a = 1',2'-Dideoxyribose
- W--> 222 <400> 14
 - 223 cctactagcg ttctcatc
 - 225 <210> SEQ ID NO: 15
 - 226 <211> LENGTH: 18
 - 227 <212> TYPE: DNA
 - 228 <213> ORGANISM: Artificial Sequence
 - 230 <220> FEATURE:
 - 231 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
- W--> 232 <221> NAME/KEY: modified_base
 - 233 <222> LOCATION: 4
 - 234 <223> OTHER INFORMATION: a = 1',2'-Dideoxyribose
- W--> 236 <400> 15
 - 237 cctactagcc ttctcatc
 - 239 <210> SEQ ID NO: 16
 - 240 <211> LENGTH: 18
 - 241 <212> TYPE: DNA
 - 242 <213> ORGANISM: Artificial Sequence
 - 244 <220> FEATURE:
 - 245 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
- W--> 247 <221> NAME/KEY: modified_base
 - 248 <222> LOCATION: 11
 - 249 <223> OTHER INFORMATION: t = 1', 2'-Dideoxyribose
- W--> 251 <400> 16
 - 252 cctactagcg ttctcatc
 - 254 <210> SEQ ID NO: 17
 - 255 <211> LENGTH: 18
 - 256 <212> TYPE: DNA
 - 257 <213> ORGANISM: Artificial Sequence
 - 259 <220> FEATURE:
 - 260 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate

RAW SEQUENCE LISTING

DATE: 03/29/2002 PATENT APPLICATION: US/09/965,116A TIME: 10:09:34

Input Set : A:\pto_ms.txt

Output Set: N:\CRF3\03292002\1965116A.raw

- W--> 262 <221> NAME/KEY: modified_base
 - 263 <222> LOCATION: 12
 - 264 <223> OTHER INFORMATION: t = 1',2'-Dideoxyribose
- W--> 266 <400> 17
 - 267 cctactagcg ttctcatc
 - 269 <210> SEQ ID NO: 18
 - 270 <211> LENGTH: 18
 - 271 <212> TYPE: DNA
 - 272 <213> ORGANISM: Artificial Sequence
 - 274 <220> FEATURE:
 - 275 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
- W--> 277 <221> NAME/KEY: modified_base
 - 278 <222> LOCATION: 13
 - 279 <223> OTHER INFORMATION: c = 1',2'-Dideoxyribose
- W--> 281 <400> 18
 - 282 cctactagcg ttctcatc
 - 284 <210> SEQ ID NO: 19
 - 285 <211> LENGTH: 18
 - 286 <212> TYPE: DNA
 - 287 <213> ORGANISM: Artificial Sequence
 - 289 <220> FEATURE:
 - 290 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
- W--> 292 <221> NAME/KEY: modified_base
 - 293 <222> LOCATION: 14
 - 294 <223> OTHER INFORMATION: t = 1', 2'-Dideoxyribose
- W--> 296 <400> 19
 - 297 cctactagcg ttctcatc
 - 299 <210> SEQ ID NO: 20
 - 300 <211> LENGTH: 18
 - 301 <212> TYPE: DNA
 - 302 <213> ORGANISM: Artificial Sequence
 - 304 <220> FEATURE:
 - 305 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
- W--> 307 <221> NAME/KEY: modified_base
 - 308 <222> LOCATION: 4, 5
 - 309 <223> OTHER INFORMATION: ac = 1',2'-Dideoxyribose
- W--> 311 <400> 20
 - 312 cctactagcg ttctcatc
 - 314 <210> SEQ ID NO: 21
 - 315 <211> LENGTH: 18
 - 316 <212> TYPE: DNA
 - 317 <213> ORGANISM: Artificial Sequence
 - 319 <220> FEATURE:
 - 320 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
- W--> 322 <221> NAME/KEY: modified_base
 - 323 <222> LOCATION: 1, 2
 - 324 <223> OTHER INFORMATION: cc = 1',2'-Dideoxyribose
- W--> 326 <400> 21
 - 327 cctactagcg ttctcatc

18

18

18

18

PATENT APPLICATION: US/09/965,116A

DATE: 03/29/2002 TIME: 10:09:35

Input Set : A:\pto_ms.txt

Output Set: N:\CRF3\03292002\I965116A.raw

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:49 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:53 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:2 L:64 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:68 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3 L:79 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:83 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4 L:94 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:98 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:5 L:117 M:283 W: Missing Blank Line separator, <220> field identifier L:143 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! $L:147\ M:258\ W:$ Mandatory Feature missing, <220> not found for SEQ ID#:9 L:158 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! $L:162 \ M:258 \ W:$ Mandatory Feature missing, <220> not found for SEQ ID#:10 L:173 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:177 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:11 L:188 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:192 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:12 L:203 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:207 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:13 L:218 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:222 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:14 L:232 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:236 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:15 L:247 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:251 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:16 L:262 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:266 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:17 L:277 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:281 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:18 L:292 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! $L:296\ M:258\ W:$ Mandatory Feature missing, <220> not found for SEQ ID#:19 L:307 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:311 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:20 L:322 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:326 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:21 L:337 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:341~M:258~W: Mandatory Feature missing, <220> not found for SEQ ID#:22 L:352 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:357 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:23 L:368 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:372 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:24 L:383 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:387 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:25 L:398 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! $L:402\ M:258\ W:$ Mandatory Feature missing, <220> not found for SEQ ID#:26 L:413 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:418 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:27

PATENT APPLICATION: US/09/965,116A

DATE: 03/29/2002 TIME: 10:09:35

Input Set : A:\pto_ms.txt

Output Set: N:\CRF3\03292002\I965116A.raw

L:429 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:433 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:28 L:444 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! $L:448\ M:258\ W:$ Mandatory Feature missing, <220> not found for SEQ ID#:29 L:459 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! $L:463\ M:258\ W:$ Mandatory Feature missing, <220> not found for SEQ ID#:30 L:474 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:479 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:31 L:490 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:494 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:32 L:505 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:509 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:33 L:520 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:524 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:34 L:535 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:539 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35 L:550 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:554 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:36 L:565 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:569 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:37 L:580 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:584 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:38 L:595 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:599 M:258 W: Mandatory Feature missing, <220 not found for SEQ ID#:39 L:610 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:614 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:40 L:625 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:629 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:41 L:639 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! $L:643\ M:258\ W:$ Mandatory Feature missing, <220> not found for SEQ ID#:42 L:654 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! $L:658\ M:258\ W:$ Mandatory Feature missing, <220> not found for SEQ ID#:43 L:669 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:673 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:44L:684 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:688 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:45 L:699 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:703 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:46 L:714 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:718 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:47 L:729 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:733 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:48 L:744 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:748 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:49 L:759 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:763~M:258~W: Mandatory Feature missing, <220> not found for SEQ ID#:50 L:774 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:778 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:51 L:789 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!

PATENT APPLICATION: US/09/965,116A

DATE: 03/29/2002

TIME: 10:09:35

Input Set : A:\pto_ms.txt

Output Set: N:\CRF3\03292002\1965116A.raw

L:793 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:52 L:804 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:808 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:53 L:819 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:823 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:54 L:973 M:283 W: Missing Blank Line separator, <400> field identifier L:1600 M:283 W: Missing Blank Line separator, <400> field identifier



Does Not Comply Corrected Diskette Needed

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/965,116A

DATE: 03/26/2002

TIME: 16:24:51

Input Set : A:\47508-577.ST25.txt

Output Set: N:\CRF3\03262002\I965116A.raw

- 3 <110> APPLICANT: Kandimalla, Ekambar R.
- 4 Zhao, Qiuyan
- 5 Yu, Dong
- 6 Agrawal, Sudhir
- 8 < 120 > TITLE OF INVENTION: Modulation of Immunostimulatory Activity of Immunostimulatory
 - 9 Modified oligodeoxynucleotide phosphorothicate Analogs by
 - 10 Positional Chemical Changes
 - 12 <130> FILE REFERENCE: HYZ-479CP (47508.577)
 - 14 <140> CURRENT APPLICATION NUMBER: US 09/965,116A
- C--> 15 <141> CURRENT FILING DATE: 2002-03-08
 - 17 <150> PRIOR APPLICATION NUMBER: US 09/712,898
 - 18 <151> PRIOR FILING DATE: 2000-11-15
 - 20 <150> PRIOR APPLICATION NUMBER: US 60/235,452
 - 21 <151> PRIOR FILING DATE: 2000-09-26
 - 23 <150> PRIOR APPLICATION NUMBER: US 60/235,453
 - 24 <151> PRIOR FILING DATE: 2000-09-26
 - 26 <160> NUMBER OF SEQ ID NOS: 112
 - 28 <170> SOFTWARE: FastSEQ for Windows Version 4.0

ERRORED SEQUENCES

- 1678 <210> SEQ ID NO: 112
- 1679 <211> LENGTH: 18
- 1680 <212> TYPE: DNA
- 1681 <213> ORGANISM: Artificial Sequence
- 1683 <220> FEATURE:
- 1684 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
- 1686 <221> NAME/KEY: modified_base
- 1687 <222> LOCATION: 13
- 1688 <223> OTHER INFORMATION: c = 1', 2'-Dideoxyribose
- 1690 <400> SEQUENCE: 112
- 1691 ctatctgacg ttctctgt

E--> 1693 / hyz-479cP(47508-577).st25

E--> 1699 | Page 1

18

remove extra material at end of filo

PATENT APPLICATION: US/09/965,116A

DATE: 03/26/2002 TIME: 16:24:53

Input Set : A:\47508-577.ST25.txt

Output Set: N:\CRF3\03262002\1965116A.raw

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:117 M:283 W: Missing Blank Line separator, <220> field identifier L:973 M:283 W: Missing Blank Line separator, <400> field identifier L:1600 M:283 W: Missing Blank Line separator, <400> field identifier L:1693 M:254 E: No. of Bases conflict, LENGTH:Input:25 Counted:30 SEQ:112

L:1693 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:18

L:1693 M:112 C: (48) String data converted to lower case,

M:254 Repeated in SeqNo=112

L:1699 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:2 L:1699 M:252 E: No. of Seq. differs, <211>LENGTH:Input:18 Found:34 SEQ:112